Corporate Resources Department

THE CITY OF CALGARY

92-00434/

CALGARY'S DEMOGRAPHIC AND SOCIAL TRENDS

Project No. 6034/01

Prepared by: *S. Nath*
Statistical Services Division
Corporate Resources Department
City of Calgary

May 1991

CALGARY'S DEMOGRAPHIC AND SOCIAL TRENDS

The composition and characteristics of Calgary's population have undergone significant changes over the last 15-20 years. This report profiles changes in Calgary's population, families, households and labour force together with emerging socio-demographic trends and their implications. Selected trends for Alberta and Canada have also been included as Calgary cannot remain unaffected by developments taking place in the larger community.

This report is intended to provide an insight into and an historical perspective on Calgary's social and demographic evolution for those involved in planning/decision-making processes and the general public.

M. V. Facey
Director
Corporate Resources

TABLE OF CONTENTS

	Page
Introduction	1
Calgary's Population Growth	2
Changes in the Age Composition of Calgary's Population	4
Median Age of the Population	10
Crude Birth/Death Rate	10
Total Fertility Rate	11
Calgary's Families and Households	17
Marriage/Divorce Rates and Marital Status	21
Labour Force	24
Education	26
Ethnic Origin	27
Mother Tongue	30
International Immigration	32
Glossary of Terms	36
References	38

Introduction:

Over the last 15-20 years, several important changes have occurred in the age, family composition, marriage/divorce rates, birth/total fertility rates and other characteristics of Calgary's population. This report profiles these socio-demographic changes along with their implications.

The document has been prepared on the basis of data from the Censuses of Canada and City of Calgary Civic Censuses. This has been supplemented by an extensive review of research papers/reports on changing demographics in Canada by public sector, private sector and other organizations. Data for 1986 in some tables of this report are for the Calgary CMA (Census Metropolitan Area) which includes eight other communities (e.g. Airdrie) in addition to the City of Calgary. Prior to 1986 the boundaries of the City of Calgary and the Calgary CMA were coterminous.

Enquiries regarding the information contained in this report can be directed to the Statistical Services Division of Corporate Resources (403) 268-1300.

Additional copies of the report can be purchased from:

Planning Information Centre
Planning and Building Department
The City of Calgary
P.O. Box 2100
Station "M"
Calgary, Alberta T2P 2M5

Telephone: (403) 268-5333

Calgary's Population Growth:

In 1971, Calgary had a population of 398,034 persons and land area of 157 square miles. By 1990, it reached a population level of 693,000 persons and land area of 259.4 square miles. The percentage increases in Calgary's population and geographical size were 74.1% and 65.2% respectively. According to the 1986 Census of Canada, Calgary is the second largest municipality in the country. The city is expected to grow to a population of three-quarters of a million by 1995 and one million by about 2010. Approximately 27% of Alberta's population resides in Calgary and a further 25% in Edmonton. During the late 1970's and early 80's Calgary was one of the fastest growing cities in Canada. Its population exceeds that of Newfoundland and is close to that of New Brunswick.

During the eight year period between 1971 and 1979 the total increase in the city's population was 107,600 persons. Over the following three years (1979-1982), Calgary recorded a total increase of 116,350 persons. During the recession and recovery years of 1982-1990, the total increase in the city's population was 69,750 persons.

Table 1 indicates Calgary's total population growth and the components of same, namely, net migration and natural increase. The natural growth component has been quite stable from year to year but net migration (the most important component of the region's population growth) has fluctuated greatly depending upon economic conditions. In the pre-recession years, Calgary experienced very high levels of immigration and a rapid population growth rate. With the current stable economic outlook provincially and the recent announcement by the Minister of Employment and Immigration of increasing levels of international immigration over the next four years, Calgary can expect moderately high levels of net in-migration.

TABLE 1

Components of Calgary's Population Growth 1976-1990

YEAR	POPULATION	NET MIGRATION	NATURAL GROWTH	ABSOLUTE INCREASE/ DECREASE IN POPULATION	% INCREASE/ DECREASE
1976	470,043				
		12,110	5,416	17,526	3.73
1977	487,569				
		12,474	5,594	18,068	3.70
1978	505,637				
		19,553	5,626	25,179	4.99
1979	530,816				
		23,300	6,502	29,802	5.62
1980	560,618				
		24,430	6,809	31,239	5.57
1981	591,857				
		23,533	7,723	31,276	5.28
1982	623,133				
		-11,205	8,764	-2,441	-0.39
1983	620,692				
		-9,635	8,757	-878	-0.14
1984	619,814				
		-2,873	8,202	5,329	0.86
1985	625,143				
		7,682	7,820	15,502	2.43
1986	640,645				
		-1,556	8,206	6,640	1.04
1987	647,285				
		1,589	8,244	9,833	1.52
1988	657,118				
		5,269	8,751	14,020	2.13
1989	671,138				
		12,799	8,948	21,747	3.24
1990	692,885				

NOTE: The column "Absolute Increase/Decrease in Population" is the sum of Net Migration and Natural Growth.

SOURCE: Civic Census

Changes in the Age Composition of Calgary's Population:

Over the last 20 years, Calgary's population has seen significant changes in its age composition due to economic and socio-demographic factors such as migration and declining fertility rates. Intense economic activity during the boom years 1979-1982 brought a large number of people to Calgary -- primarily in the 19-30 years age range. This caused a population growth never experienced before. The recession years of 1982-1984 caused a large outflow of young people from the city.

Calgary's total fertility rate dropped from 2.2 (replacement level 2.1) in 1971 to 1.56 in 1986, slowing the growth of the younger population. As Table 2A shows, in 1976 the age group 0-24 years formed almost 50% of Calgary's population. In 1989, the proportion of 0-24 year olds dropped to 36.7% and that of the age group 25 years and older increased to 63.3%. By the year 2000, the former is expected to decrease to 33% and the latter is projected to increase to 67% if the current fertility rate of 1.72 and moderate levels of migration continue. Similar growth patterns for these two age groups emerge for the province of Alberta as indicated by Table 2B.

TABLE 2A

Calgary's Population

AGE GROUPS	YEAR					
	1976	1981	1986	1991	1996	2000
0-24	220,335 (46.9)	262,050 (44.2)	246,010 (38.4)	252,400 (35.5)	272,200 (33.9)	284,900 (33.0)
25+	249,555 (53.1)	330,675 (55.8)	394,485 (61.6)	458,200 (64.5)	529,800 (66.1)	579,500 (67.0)
TOTAL	469,890	592,725	640,495	710,500	802,000	864,400

SOURCE: Corporate Resources and Census of Canada

TABLE 2B

Alberta's Population

AGE GROUPS	YEAR 1976	1981	1986	1991	1996	2000
0-24	882,350 (48.0)	1,020,445 (45.6)	968,415 (40.9)	933,800 (37.8)	952,300 (36.4)	971,000 (35.5)
25+	955,670 (52.0)	1,217,300 (54.4)	1,397,320 (59.1)	1,538,300 (62.2)	1,662,200 (63.6)	1,766,500 (64.5)
TOTAL	1,838,020	2,237,745	2,365,735	2,472,100	2,614,500	2,737,500

SOURCE: Corporate Resources and Alberta Bureau of Statistics

Changes in the age composition of Calgary's population for selected age groups are shown in Table 3A and discussed below:

0-14 Years -

This age group is dependent upon persons of labour force age (15-64 years) for its well-being. It comprised 25.5% of Calgary's population in 1976, 21.5% in 1989 and is expected to drop to 20.4% of the population by the year 2000. This age group attends day care, nursery schools, ECS (Early Childhood Services) programs and elementary/junior high schools.

15-24 Years -

The 15-24 year age group represented 21.4% of the population in 1976, 15.2% in 1989 and is projected to be 12.6% of the population by the year 2000. The part of this age group which does not attend technical/academic institutions enters the labour force and adult life. These persons mostly rent dwellings, participate in household/family formation and are very mobile -- i.e., can migrate in search of jobs and other opportunities.

Table 3B provides a further breakdown of the 0-24 years age group into pre-school age, elementary to senior high and post-secondary school populations. As can be seen, the proportion of the population attending elementary, junior and senior high schools is expected to drop from 24.7% in 1976 to 16.8% in 1991 and remain stable at about 17% until the year 2000. The population 19-24 years old which attends post-secondary institutions is projected to decline steadily from 13.8% in 1976 to 7.6% by the year 2000. These trends have implications for those sectors of the economy/society which serve these populations. School closures of the late 70's in Calgary are one example of the impact of this trend.

25-64 Years -

This is the age group which is most economically active. Persons in this age group segment of the labour force own/buy homes, durables, participate in family/households formation and support the dependent age groups, namely, children 0-14 and seniors 65+ years.

The widely talked about "aging of the population" is also reflected in data on Calgary's population. Whereas the proportion of the population under 25 years is expected to steadily decline over the decade of the 90's, that of the age group 25-64 years increased from 46.6% in 1976 to 56% in 1989 and is expected to further increase to 58.3% by the year 2000.

These trends have implications for various sectors of society and the economy in the 1990's. The recent renovation/expansion of shopping centres in Calgary to serve the growing adult population is one example. This age group will also impact the policies/programs of governments at all levels in the 90's. The "baby boomers" were an influential factor in the last U.S. election.

65+ Years -

The total number of seniors in Calgary was 30,415 persons in 1976. It is projected to more than double to 75,700 persons by the year 2000. The proportion of seniors in Calgary is expected to increase from 6.5% in 1976 to 8.8% by the turn of the century. The percentage of seniors in Canada is projected to be about 12% and for the province of Alberta to be 10.3% at that time.

Figure 1 shows population pyramids for Calgary for the years 1976, 1989 and 2000.

TABLE 3A

Calgary's Population by Age Groups

AGE GROUPS	YEAR 1971	1976	1989	2000
0-14	123,065 (30.5)	119,925 (25.5)	144,192 (21.5)	176,200 (20.4)
15-24	77,295 (19.2)	100,410 (21.4)	102,083 (15.2)	108,700 (12.6)
25-64	177,575 (44.0)	219,140 (46.6)	375,544 (56.0)	503,800 (58.3)
65+	25,385 (6.3)	30,415 (6.5)	49,319 (7.3)	75,700 (8.8)
TOTAL	403,320	469,890	671,138	864,400

Source: Corporate Resources and Census of Canada

TABLE 3B

Calgary's Pre- and Post-Secondary School Population

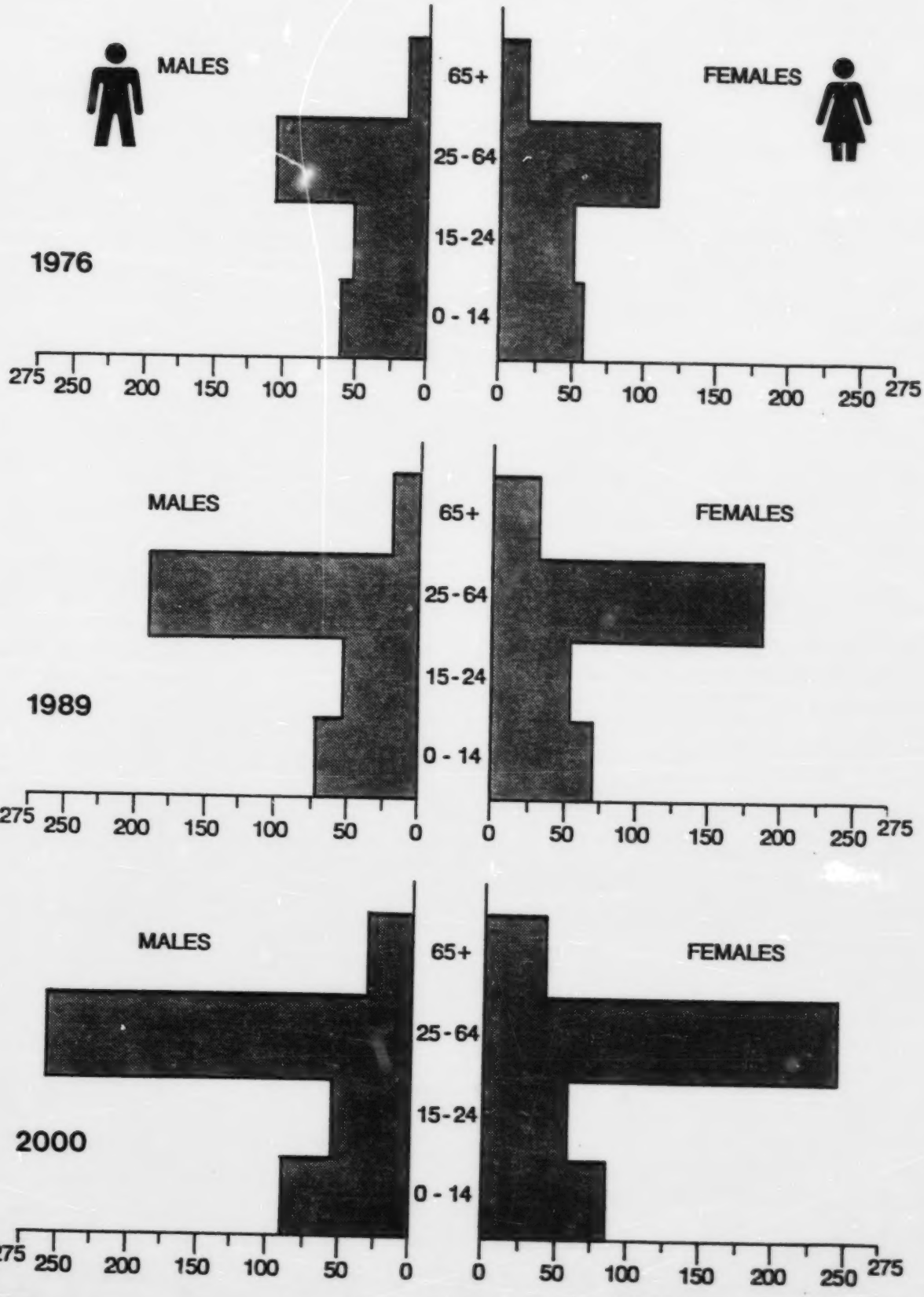
AGE GROUPS	YEAR 1976	1981	1986	1991	1996	2000
0-5	44,745 (9.8)	52,665 (8.9)	60,651 (9.5)	67,600 (9.5)	73,200 (9.1)	70,600 (8.2)
6-18	112,615 (24.7)	114,970 (19.4)	109,357 (17.1)	119,500 (16.8)	134,600 (16.8)	148,300 (17.2)
19-24	62,975 (13.8)	94,415 (15.9)	76,002 (11.9)	65,300 (9.2)	64,400 (8.0)	66,000 (7.6)
TOTAL	469,890	592,725	640,495	710,500	802,000	864,400

Source: Corporate Resources and Census of Canada

FIGURE 1

POPULATION PYRAMIDS FOR CALGARY

(in thousands)



SOURCE: Census of Canada and Civic Census

Median Age of the Population:

Relative to Canada as a whole, Calgary and Alberta have younger populations. The median age of Calgarians in 1986 was 29.6 years, of Albertans 29.1 years and that of Canadians as a whole was 31.6 years. Calgary's median age is expected to increase to 35 years by the year 2000. Alberta will also reach this median age by the end of the decade if fertility rates continue to stay below the replacement level. A recent population projection report for Canada by Statistics Canada estimates the median age of the Canadian population will be about 43 years by the year 2011. Calgarians' median age at that time would be about 39 years.

The most important factor attributed to the aging of the population is a declining birth/total fertility rate.

Crude Birth/Death Rate:

Table 4A contains data on crude birth and death rates for Calgary.

The crude birth rate for Calgary declined from 29.8 births per 1,000 population in 1961 to 21.0 in 1971. Over the last six years it has fluctuated around 17. Data for Alberta also show a similar pattern. If further declines in birth rates continue, at some time in future there will be more deaths than births causing natural growth of population (excess of births over deaths) to turn negative.

Because of longer life expectancies due to advances in medical technology, the crude death rate has gradually declined over the years and has been stable at about 4.5 per 1,000 population over the last six years. Further significant declines are not expected in the future.

Total Fertility Rate:

Total fertility rates in Calgary, Alberta and Canada have been declining over the last several years and are below the replacement level of 2.1 children per woman. The same is the case with most of the provinces, the U.S. and many of the Western industrialized countries as Tables 4B and 4C show. In Canada, Quebec has the lowest fertility rate of 1.5.

Declining fertility rates have been a concern of both governments and demographers. Some of the European governments have established pro-natalist programs/policies to boost birth rates. For example, France provides incentives in terms of education and day care among other benefits. In Canada, the Quebec Government provides baby bonuses, other fiscal benefits and bonus points to immigrants with children under 12 years of age.

To deal with the issue of an aging population and declining birth/fertility rates, many ideas have been put forward, some of which are: immigration of young children, age-specific immigration, higher immigration levels, pro-natalist policies or a mixture of these. The Federal Government has not established any policies/programs so far. On the basis of the "Demographic Review" recently completed by Health and Welfare Canada, the Minister of Employment and Immigration has increased the immigration level to 250,000 persons over the next four years. Calgary and Alberta will benefit from the higher levels of immigration. The impact of this policy on the total fertility rate is not expected to be significant.

TABLE 4A

Crude Birth/Death Rates for Calgary

YEAR	CRUDE BIRTH RATE	CRUDE DEATH RATE
1961	29.8	6.8
1971	21.0	6.1
1975	16.9	5.9
1980	17.7	5.4
1985	17.7	4.6
1986	17.2	4.5
1987	17.0	4.3
1988	17.3	4.8
1989	17.9	4.9
1990	17.6	4.7

SOURCE: Alberta Health

TABLE 4B

Total Fertility Rates

Calgary, Alberta and Canada

YEAR	1966-1986 CALGARY	ALBERTA	CANADA
1966	2.79	3.07	2.81
1971	2.19	2.43	2.19
1976	1.73	2.04	1.80
1981	1.59	1.94	1.70
1986	1.56	1.93	1.67

SOURCE: Censuses of Canada 1966-1986

TABLE 4C

Total Fertility Rates for Selected Industrialized Countries

YEAR	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Canada	2.30	1.90	1.80	1.80	1.80	1.75	1.75	1.70	1.70	1.68	1.66
U.S.A.	2.46	1.80	1.77	1.82	1.80	1.86	1.87	1.82	1.81		
Australia	2.86	2.22	2.14	2.04	1.98	1.94	1.89	1.94	1.93		
France	2.47	1.93	1.83	1.87	1.83	1.87	1.96	1.97	1.94	1.79	1.81
Germany (FRG)	2.02	1.45	1.45	1.40	1.38	1.38	1.44	1.44	1.41	1.33	
Sweden	1.94	1.78	1.69	1.65	1.60	1.66	1.68	1.63	1.62	1.61	
United Kingdom	2.44	1.82	1.75	1.70	1.77	1.88	1.91	1.81	1.77	1.77	1.77
Poland	2.20	2.27	2.30	2.23	2.17	2.23	2.25	2.22	2.30		

SOURCES: 1. Council of Europe, Recent Demographic Developments, 1984 and 1985
2. Statistics Canada, Current Demographic Analysis, June 1987

Some of the socio-demographic factors associated with declining fertility rates are postponement of marriages/births to a later age, increases in the percentage of single women or ever-married women who have not yet had any children and couples deciding not to have children.

Table 5A shows the number of births to women of child-bearing age by age groups for Calgary. The number of children born to women under 25 years of age is decreasing whereas the number born to those age 25 and over has increased. As Table 5B shows, the percentage of ever-married Canadian women who have not yet had any children has been increasing.

Data on marriage rates per 1,000 single women (Table 6A) for Canada and Alberta show a declining trend since 1971. The percentage of single women age 30-34 has also steadily increased since 1971 for both Alberta and Canada (Table 6B).

Table 6C contains data on the percentage of childless women in the child-bearing age group 15-44. Alberta's percentage of these women increased from 12.4% in 1961 to 25.6% in 1981 and is among the highest of the provinces along with B.C., Quebec and Ontario.

TABLE 5A

Number of Children Born to Women by Age Groups

AGE GROUPS	1976	1981	1986	1988
Under 25	3,395	4,010	2,889	2,736
25 - 44	4,559	6,434	7,991	8,748

SOURCE: Alberta Health

TABLE 5B

Proportion of Ever-Married Canadian Women Who Have Not Yet Had Any Children

AGE	PROPORTION 1961	1971	1981
20-24	26%	42%	54%
25-29	14%	21%	30%
30-34	---	9%	14%

SOURCE: Censuses of Canada 1961-1981
NOTE: 1986 Census of Canada did not collect this information.

TABLE 6A

Marriage Rate (per 1,000) Single Women

YEAR	ALBERTA	CANADA
1961	135.0	93.1
1971	129.8	100.0
1981	112.9	80.7
1986	92.9	71.9

SOURCE: Statistics Canada

TABLE 6B

Percent of Single Women Age 30-34

YEAR	ALBERTA	CANADA
1961	7.1	10.5
1971	5.9	9.1
1981	7.8	10.5
1986	10.9	13.3

SOURCE: Statistics Canada

TABLE 6C

Percent of Women Age 15-44 Who are Childless

YEAR	ALBERTA	CANADA
1961	12.4	13.1
1971	17.6	18.1
1981	25.6	22.7

SOURCE: Statistics Canada

Calgary's Families and Households:

Data on the number of husband-wife and lone-parent families for Calgary are provided in Table 7A. The proportion of husband-wife families declined from 89.6% in 1976 to 87.5% in 1986. According to the 1986 Census of Canada, of the 155,070 husband-wife families 90.9% were married and 9.1% common-law. The percentage of lone-parent families increased from 10.4% to 12.5% between 1976 and 1986. Of the 22,170 lone-parent families in 1986, 84% had a woman as the head of the family, and 16% had a man.

The percentage of families with no children increased from 31.0% in 1976 to 33.9% in 1986 (Table 7B). Data from the City's own censuses also show a gradual increase in the percentage of households with no children in the 0-14 years age group. Families with one or two children also had increases -- those with one child from 22.8% in 1976 to 26.4% in 1986 and those with two children from 25.9% to 27.4%. The proportion of families with three or more children dropped from 20.3% in 1976 to 12.3% in 1986.

The average number of children per family in Calgary (Table 7C) has steadily declined from 1.7 in 1971 to 1.2 in 1986. This trend corresponds to the data for Canada on the number of children 0-24 years per family and the general declining total fertility rate trend.

TABLE 7A

Calgary's Families

FAMILY	1976	1981	1986
Husband-Wife	104,835 (89.6)	133,135 (88.9)	155,070 (87.5)
Lone Parent	12,160 (10.4)	16,705 (11.1)	22,170 (12.5)
TOTAL	116,995	149,840	177,245

NOTE: Figures in parentheses are percentages.
SOURCE: Censuses of Canada

TABLE 7B

Number of Children in Families in Calgary

NUMBER OF CHILDREN	NUMBER OF FAMILIES 1976	1981	1986
0	36,315 (31.04)	52,235 (34.86)	59,965 (33.85)
1	26,710 (22.84)	36,795 (24.56)	46,835 (26.44)
2	30,240 (25.85)	39,265 (26.21)	48,530 (27.40)
3 or more	23,730 (20.28)	21,540 (14.38)	21,810 (12.31)

NOTE: Figures in parentheses are proportions.
SOURCE: Censuses of Canada

TABLE 7C

Average Number of Children Per Family

YEAR	AVERAGE NUMBER OF CHILDREN PER FAMILY FOR CALGARY	CHILDREN 0-24 YEARS OF AGE PER FAMILY FOR CANADA
1971	1.7	1.7
1976	1.5	1.5
1981	1.3	1.4
1986	1.2	1.3

SOURCE: Statistics Canada

Table 8A shows the percentage distribution of family and non-family households for the cities of Calgary and Edmonton plus the province of Alberta. The percentage of family households in Calgary dropped from 80.6% in 1966 to 69.6% in 1986 whereas that of non-family households increased from 19.4% to 30.4%. Similar trends are revealed by data for Edmonton and Alberta. This is attributed to factors such as young adults adopting more "independent" life styles, the increasing number of drop-outs from school, increases in divorces and seniors living independently.

Data on the average size of households and families in Canada are provided in Table 8B. The household size for Canada dropped from 3.7 persons in 1966 to 2.8 in 1986. Family size also dropped from 3.9 in 1966 to 3.1 in 1986. Calgary's household size declined from 3.39 in 1968 to 2.65 in 1985 as is evident from data in Table 8C. It has stabilized at around 2.63 persons over the last few years.

TABLE 8A

Percentage Distribution of Family and Non-Family Households For the Cities of Calgary and Edmonton and the Province of Alberta 1966-1986

YEAR	CALGARY		EDMONTON		ALBERTA	
	FAMILY	NON-FAMILY	FAMILY	NON-FAMILY	FAMILY	NON-FAMILY
1966	80.6	19.4	82.3	17.7	82.4	17.6
1971	78.9	21.1	80.2	19.8	80.6	19.4
1976	74.5	25.5	74.7	25.3	77.1	22.9
1981	70.0	30.0	70.9	29.1	73.7	26.3
1986	69.6	30.4	67.1	32.9	72.8	27.2

SOURCE: Censuses of Canada

TABLE 8B

Average Size of Households and Families in Canada

	1966	1971	1976	1981	1986
Persons per Household	3.7	3.5	3.1	2.9	2.8
Persons per Family	3.9	3.7	3.5	3.3	3.1

SOURCE: Censuses of Canada

TABLE 8C

Household Size for Calgary

	1968	1985	1986	1987	1988	1989	1990
Household Size	3.39	2.65	2.64	2.63	2.63	2.62	2.64

SOURCE: Civic Censuses

Marriage/Divorce Rates and Marital Status:

Table 9A contains data on marriage and divorce rates for Calgary and Alberta. Marriage rates for Calgary dropped from 11.6 per 1,000 in 1982 to 8.3 in 1990 and those for Alberta from 9.5 to 8.2 in 1989. Over the last several years, divorce rates for Calgary have fluctuated around 5.0 and those for Alberta around 3.5 per 1,000.

TABLE 9A

Marriage and Divorce Rates
Calgary and Alberta
1975-1987

YEAR	MARRIAGE RATE PER 1000 POPULATION		DIVORCE RATE PER 1000 POPULATION	
	CALGARY	ALBERTA	CALGARY	ALBERTA
1980	10.5	10.0	5.5	3.6
1981	11.0	9.7	5.4	3.8
1982	11.6	9.5	5.6	3.8
1983	9.6	9.0	4.8	3.7
1984	8.9	8.5	5.7	3.6
1985	8.8	8.4	5.7	3.7
1986	8.1	8.0	3.4	3.1
1987	8.2	7.8	4.9	3.5
1988	8.4	8.1	4.3	3.5
1989	8.5	8.2		
1990	8.3			

SOURCE: Alberta Health, Alberta Bureau of Statistics and Statistics Canada

Table 9B shows data on the divorce rate per 1,000 married women for Alberta and Canada. Alberta's divorce rate increased from 3.5 in 1961 to 16.2 per 1,000 married women -- the highest among all the provinces and higher than the national rate of 12.4. It is due to the fact that Alberta has been referred to as the "divorce capital" of Canada.

TABLE 9B

Divorce Rate per 1,000 Women for Alberta and Canada

	1961	1971	1981	1986
Alberta	3.5	9.9	15.6	16.2
Canada	1.6	6.1	11.3	12.4

SOURCE: Statistics Canada

Data on the marital status of Calgarians is provided in Table 9C.

During 1976-1981, the population of single (never married) persons 15 years of age and over increased by 44.7%, but during 1981-1986 this increase was only 3.43%. This relates to the fact that there was a large outflow of young people from Calgary during the recession years. The number of married persons increased by 27.9% during 1976-1981 and by 15.8% during 1981-1986. The percentage increases among divorced persons were 62.6% and 34.4% respectively during 1976-1981 and 1981-1986.

TABLE 9C

Marital Status of Calgarians

	1976		1981		1986
Single (never married) 15 years of age and over	97,400	(44.7)	140,965	(3.43)	145,800
Married	222,900	(27.9)	285,005	(15.8)	330,165
Widowed	17,330	(14.0)	19,755	(16.0)	22,900
Divorced	12,350	(62.6)	20,075	(34.4)	26,970

NOTE: Figures in parentheses represent percentage increases.
SOURCE: Censuses of Canada

Labour Force:

Table 10 contains data on labour force participation rates for Calgary's population by sex for the years 1976, 1981 and 1986.

The labour force participation rate of males in the 15-24 years age group rose from 72.6% in 1976 to 82.3% in 1981 and dropped to 75.3% in 1986. The year 1981 was the height of the boom period and 1986 the year of world oil price collapse. Participation of males in the age group 25 and over increased from 82.7% to 89.4% in 1981, and then dropped to 86.4% in 1986. The labour force participation rate of married males decreased slightly from 89.8% in 1981 to 87.3% in 1986.

For all females, the labour force participation rate increased from 50.7% in 1976 to 66.6% in 1986. Among women in the age group 15-24 years, it increased from 62.1% in 1976 to 74.5% in 1981 before dropping to 72.1% in 1986. Females in the age group 25 and over showed steady increases from 46.1% in 1976 to 65.0% in 1986. The labour force participation rate of married women was 47.6% in 1976. It increased to 57.3% in 1981 and 66.6% in 1986.

Higher participation rates of women in the labour force is cited as one of the factors contributing to the declining birth rate. This represents a trend in choices made by women between gainful employment and having/raising children.

TABLE 10

Calgary's Labour Force Participation Rate

Male

AGE GROUP	1976	1981	1986
		%	
15-24	72.6	82.3	75.3
25 and over	82.7	89.4	86.4
Married	-	89.8	87.3
TOTAL	79.8	87.3	84.0

Female

AGE GROUP	1976	1981	1986
		%	
15-24	62.1	74.5	72.1
25 and over	46.1	59.2	65.0
Married	47.6	57.3	66.6
TOTAL	50.7	63.7	66.6

SOURCE: Censuses of Canada

Education:

Calgary has a well-educated population compared to other major urban centres in Western Canada. Persons indicating the highest level of schooling as University (with or without a degree) formed 27.4% of Calgary's (CMA) population in 1986. The comparable percentage was 22.2% for Edmonton, 23.2% for Winnipeg and 24.6% for Vancouver. Table 11 shows data on highest level of schooling from the Federal Censuses of 1976, 1981 and 1986.

In 1976, 13.2% of Calgary's population indicated the highest level of schooling as less than Grade 9. This percentage dropped to 8.1% in 1981 and to 7.1% in 1986. The percentage of those indicating Grade 9-13 as the highest level of schooling dropped steadily from 45.5% in 1976 to 37.0% in 1986.

The percentage of the population with post-secondary (including university without a degree) schooling increased from 31.4% in 1976 to 40.8% in 1986. Persons with a university degree comprised 15.1% of the population 15 years and older in 1986 as compared to 9.9% in 1976.

TABLE 11

Highest Level of Schooling - Calgary
(Percent)

HIGHEST LEVEL OF SCHOOLING	1976	1981	1986
Less than Grade 9	13.20	8.10	7.12
Grades 9-13	45.50	39.70	37.00
Post-Secondary (includes University without degree)	31.40	39.00	40.80
University Degree	9.92	13.18	15.10

SOURCE: Censuses of Canada

Calgary's Population by Ethnic Origin:

Historical data on Calgary's population by ethnic origin are provided in Table 12. Definitions of ethnic or cultural origin used in the Censuses of Canada and notes on comparability of data are provided in the Glossary of Terms (Page 36). Readers are advised to refer to these and exercise caution in interpreting the data. Table 12 indicates number of persons by ethnic origin (single response only) and their ranking by population size for the census years 1971 through 1986. Populations have been classified by ethnic origin with only the highest ten ranks for a given year being reported. Data for other ethnic origins not included in the table are available. Calgarians indicating their ethnic origins as British and German have maintained the first and second rankings respectively during 1971-1986. Those indicating their ethnic origin as Scandinavian ranked third in 1971 and eighth in 1986. Other segments of Calgary's population indicating French, Ukrainian, Dutch, Italian, Polish and Hungarian saw their ranks shift slightly up and down over the years. Chinese ranked tenth in 1971, moved to sixth in 1981 and third in 1986. Persons of Indo-Pakistani origin ranked ninth in 1981 while the population indicating South Asian as its ethnic origin ranked fifth in 1986.

It should be noted that because of changes in the way ethnic origin has been reported in different census years, the numbers shown for various groups in Table 12 do not necessarily represent their "true" prevalence in the community. For example, in 1986 a total of 325,140 persons indicated that <u>one</u> of their ethnic origins was British, but only 186,780 stated that their <u>sole</u> origin was British.

Figure 2 is a graph showing the ethnic origin of the populations of Calgary and Toronto for the years 1951 and 1986. The ethnic composition of both cities changed significantly between 1951 and 1986, with changes in Calgary being of a lesser degree than those in Toronto.

TABLE 12

Population for Calgary by Ethnic Origin (single responses only)

	1971	1981	1986
	Population and Rank		
British	225,835 (1)	287,840 (1)	186,780 (1)
German	50,825 (2)	48,765 (2)	40,130 (2)
Scandinavian	20, 010 (3)	15,995 (5)	10,545 (8)
French	16,455 (4)	24,550 (3)	15,916 (4)
Ukrainian	15,850 (5)	18,045 (4)	13,585 (6)
Dutch	13,975 (6)	14,150 (7)	13,225 (7)
Italian	9,810 (7)	11,240 (8)	10,535 (9)
Polish	7,465 (8)	7,345 (10)	6,900 (10)
Hungarian	5,520 (9)	---	---
Chinese	4,630 (10)	15,545 (6)	22,705 (3)
Indo-Pakistani	---	8,915 (9)	---
South Asian	---	---	13,885 (5)

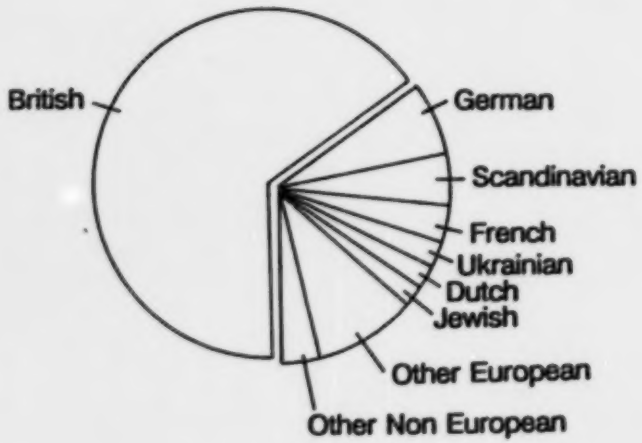
NOTE: (1) Numbers in parentheses represent ranks based on the size of the population.
(2) Prior to the 1988 Census, boundaries of Calgary and Calgary (CMA) were coterminous.

SOURCE: Censuses of Canada

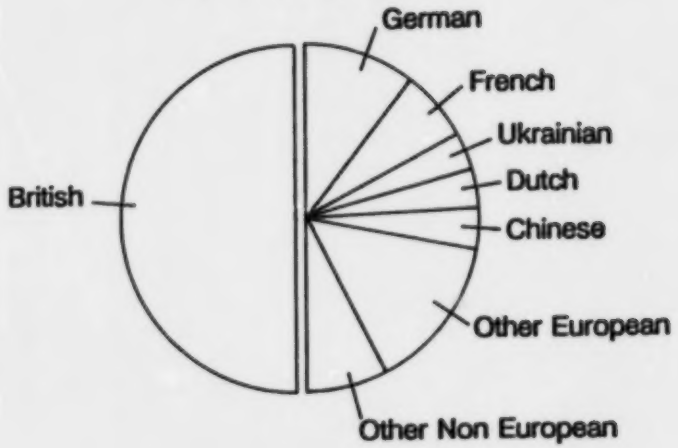
FIGURE 2

ETHNIC ORIGIN OF THE POPULATION

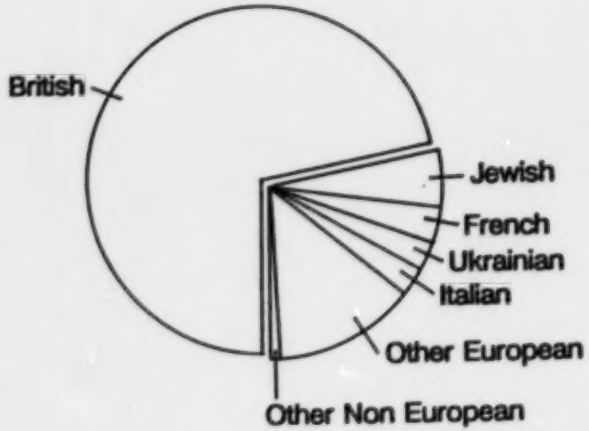
CALGARY, 1951



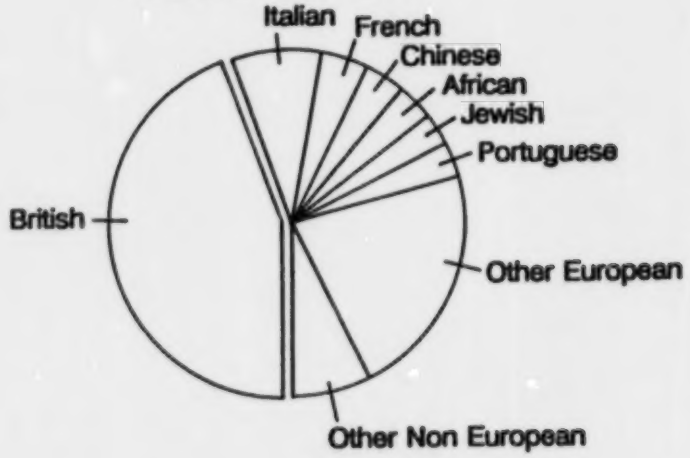
CALGARY, 1986



TORONTO, 1951



TORONTO, 1986



(Courtesy of Health & Welfare Canada)

Calgary's Population by Mother Tongue:

Table 13 contains data on Calgary's population by mother tongue. Different languages were ranked according to the frequency with which they were identified as a mother tongue. Mother tongues with the first ten ranks for the period 1971-1986 are reported in the table. Data for other mother tongues not included in the table are available.

English retains its rank as first for all the census years 1971 through 1986. German ranked second until 1986 when it became third. French ranked fifth in 1971 and attained the higher rank of third in 1981 before dropping to fourth in 1986. Persons indicating Italian, Ukrainian, Dutch, Hungarian and Scandinavian as their mother tongue have had their ranking move up or down slightly since 1971. Those indicating Chinese and Japanese as their mother tongue ranked seventh in 1971, third in 1976, fourth in 1981 and second in 1986. The population indicating Indo-Pakistani as their mother tongue ranked tenth in 1976 and seventh in 1981. Persons indicating Indo-Iranian as their mother tongue ranked eighth in 1986. The population with Polish as their mother tongue ranked tenth in 1981.

The growing diversity of Calgary's population is reflected in these and other data provided in this report.

TABLE 13

Calgary's Population by Mother Tongue

	1971	1976	1981	1986
	Population and Rank			
British	338,835 (1)	396,815 (1)	486,730 (1)	550,870 (1)
German	17,940 (2)	15,155 (2)	17,820 (2)	15,555 (3)
French	5,305 (5)	5,894 (4)	12,695 (3)	8,215 (4)
Italian	6,345 (3)	5,595 (6)	6,805 (5)	5,585 (5)
Ukrainian	5,680 (4)	5,635 (5)	6,795 (6)	5,005 (7)
Dutch	5,170 (6)	4,145 (7)	5,695 (8)	5,015 (6)
Hungarian	3,585 (8)	2,850 (8)	---	3,350 (9)
Scandinavian	3,415 (9)	2,350 (9)	3,005 (9)	2,350 (10)
Japanese & Chinese *	4,345 (7)	6,010 (3)	12,540 (4)	16,870 (2)
Croatian/ Serbian, etc.	1,560 (10)	---	---	---
Indo-Pakistani	---	1,935 (10)	5,990 (7)	---
Polish	---	---	2,570 (10)	---
Indo-Iranian **	---	---	---	4,165 (8)

SOURCE: Censuses of Canada

* Data on Chinese and Japanese are not available separately for the years 1971 and 1976. In 1981, there were 11,840 persons indicating Chinese as their mother tongue and 700 Japanese. The figures for 1986 are 16,190 and 680 respectively.

** In 1986, Iranian was added to the Indo-Pakistani languages. Due to an unavailability of data, a few mother tongues are not included in the 4,165 persons indicated for the year 1986.

International Immigration:

Net migration to Calgary (Table 1) consists of persons moving into the city from within the province, persons moving from other parts of Canada, and those immigrating from other countries. Calgary, being one of the major urban centres in the province and the country, attracts international immigrants. Table 14 shows the number of immigrants to Calgary and Alberta. During 1981-90, Calgary's annual international immigration level has ranged from 3,600 to 8,300; whereas, for Alberta it ranged from 9,000 to 19,000 immigrants.

Table 15 contains data on the number of immigrants to Calgary for different periods between 1946 and 1986 and the sources of immigration. With the exception of the period 1982-1986, only those sources of immigration have been included for which the number of immigrants was 1,000 or more. For the period 1982-1986, this limit was reduced to 500 or more immigrants.

During 1946-1966, the U.S. and Europe were the main sources of immigration. The People's Republic of China, U.K. and U.S. have been sources of immigration throughout the 1946-1986 period. Between 1967 and 1977, many other Asian and African countries emerged as sources of 1,000 or more immigrants while some of the European countries from the period 1946-1966 (with the exception of Italy) dropped out of this category. During 1978-1982, Eastern and South East Asia and Vietnam were added to the list of those sources with 1,000 or more immigrants. Between 1982 and 1986, the U.S., Philippines and Vietnam, provided immigrants in the range of 900 to 1,900 persons.

Figure 3 is a graph of sources of immigration for the province of Alberta for the years 1981 and 1989.

TABLE 14

Number of International Immigrants to Calgary and Alberta

YEAR	CALGARY	ALBERTA
1981	8,389	19,294
1982	7,964	17,948
1983	4,360	10,688
1984	4,540	10,670
1985	3,669	9,001
1986	4,179	9,580
1987	5,122	11,970
1988	5,762	14,030
1989	6,855	16,050
1990	6,869	18,730

NOTE: The 1990 figure for Calgary is for the months January through October.

SOURCE: Statistics Canada

TABLE 15

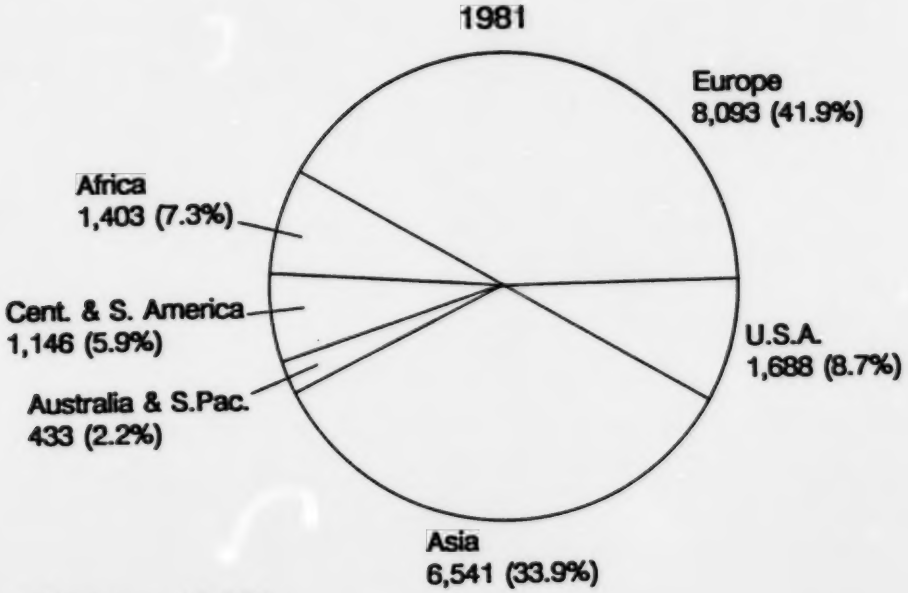
Number and Sources of Immigrants for Calgary 1946-1986

SOURCE	1946-1966	1967-1977	1978-1982	1982-1986
	----------(1000 or more)----------			(500 or more)
East Germany	1,005			
Hungary	1,795			
Italy	3,600	1,160		
Netherlands	4,050			
Poland	1,950		1,000	500
Scandinavia	1,455			
U.K.	7,720	9,985	4,220	550
U.S.	2,635	3,130	1,605	945
West Germany	4,905	1,305		
Chile		1,080		
Czechoslovakia		1,000		
East Africa		1,785		
Eastern & South East Asia		1,000	1,010	
Hong Kong		2,800	1,285	710
India		2,915	1,445	605
Jamaica		1,000	-	
People's Republic of China	1,540	2,425	2,175	830
Philippines		2,500	1,325	1,030
Tanzania		1,380		
Yugoslavia		1,000		
Vietnam			4,750	1,915
North & Central America				705

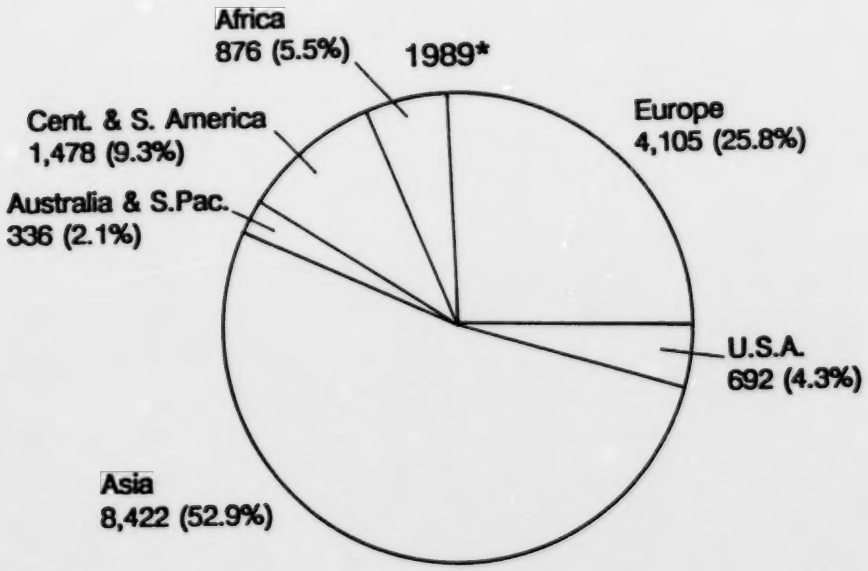
SOURCE: Censuses of Canada

FIGURE 3

Sources of Immigration
Alberta, 1981 and 1989*



TOTAL = 19,304



TOTAL = 15,909

*Note: Data for 1989 is preliminary.
Source: Labour Market Research Division, Career Development & Employment, March 1990.

APPENDIX A

Glossary of Terms

CENSUS METROPOLITAN AREA (CMA)

This refers to the main labour market area of an urbanized core (or continuous built-up area) having 100,000 or more population. CMAs are defined by Statistics Canada and are usually known by the name of the urban area forming their urbanized core. They contain whole municipalities (census sub-divisions). CMAs are comprised of (1) municipalities completely or partly inside the urbanized core, and (2) other municipalities, if (a) at least 40% of the employed labour force living in the municipality works in the urbanized core, or (b) at least 25% of the employed labour force working in the municipality lives in the urbanized core.

Note: Prior to 1986, the boundaries of Calgary and the Calgary CMA were coterminous. This changed with the 1986 Federal Census. The Calgary CMA now includes eight other communities.

CRUDE BIRTH RATE is the number of births per 1,000 population for a given year.

CRUDE DEATH RATE is the number of deaths per 1,000 population for a given year.

TOTAL FERTILITY RATE is the sum of the age-specific fertility rates. It represents the average number of children which would be born to one thousand hypothetical females subjected to current age-specific fertility rates assuming mortality before age 50 to be zero. The total fertility rate is customarily divided by 1,000 and expressed as a summary figure. For example:

$$\text{Total Fertility Rate} = \frac{1,560}{1,000} = 1.56$$

ETHNIC ORIGIN and COMPARABILITY OF DATA - In both the 1971 and 1981 Censuses of Canada, respondents were asked "To which ethnic or cultural group did you or your ancestors belong on first coming to this continent?". **In the 1971 Census, only the respondent's paternal ancestry was to be reported**, theoretically resulting in one ethnic origin per respondent. **In the 1981 Census**, the restriction of reporting only the paternal ancestry was removed and thus **a person may have indicated more than one ethnic origin. In the 1986 Census**, the phrase "On first coming to this continent" was dropped and the question asked was "To which ethnic or cultural group(s) do you or did your ancestors belong?". **The respondents were allowed to indicate as many origins as applicable.** For 1981 and 1986, data on multiple origin responses such as "British and French" or "British and other" are available. For example in 1981, 10,440 persons reported "British and French" as their ethnic origins. In 1986 this figure was 27,155. Those indicating "British and other" as their ethnic origin numbered 39,710 and 111,205 respectively in 1981 and 1986.

MOTHER TONGUE refers to the first language learned in childhood and still understood by the individual at the time of the census.

FAMILY HOUSEHOLD refers to a household that contains at least one census family, i.e. persons living in the same dwelling who have a husband, wife or parent-never-married child relationship.

NON-FAMILY HOUSEHOLD refers to one person who lives in a private dwelling or to a group of persons who occupy a private dwelling and do not constitute a census family.

References

- Alberta Bureau of Statistics, Population Projections May 1988.
- Alberta Career Development and Employment, The Alberta Workforce to the Year 2000, 1990.
- Corporate Resources, Calgary's Demographic Trends 1976-1991, April 1987.
- Corporate Resources, City of Calgary Housing Profile and Households Projections 1989-2000, May 1989.
- Corporate Resources, City of Calgary Population Projections 1988-2050, September 1988.
- Council of Europe, Demographic Trends, 1986.
- Employment and Immigration Canada, Annual Report to Parliament: Immigration Plan for 1990-1991, October 1990.
- Employment and Immigration Canada, Immigration to Alberta and the Northwest Territories: A Statistical Overview.
- Employment and Immigration Canada, Policy, Implications of Demographic Change in Canada, 1988.
- Employment and Immigration Canada, Population Aging and Immigration Policy in Canada: Implication and Prescription, August 1986.
- Health and Welfare Canada, Charting Canada's Future: A Report on the Demographic Review, 1989.
- Institute for Public Policy and Research, Demographic Change and the Canadian Economy: An Overview, January 1987.
- Institute for Public Policy and Research, Population Change and the Canadian Economy: A Survey of the Issues, January 1987.
- Statistics Canada, Current Demographic Analysis: Report on the Demographic Situation in Canada 1988, May 1990.
- Statistics Canada, Demographic Aspects of Vital Statistics: Fertility, March 1981.
- Statistics Canada, Fertility in Canada: From Baby-boom to Baby-bust, June 1987.
- Statistics Canada, Immigrants in Canada, January 1990.
- Statistics Canada, Population Projections for Canada, Provinces and Territories 1989-2011, March 1990.

- Statistics Canada, Population Projections for Canada, Provinces and Territories 1989-2011, March 1990.
- Statistics Canada, Projection of Households and Families for Canada, Provinces and Territories, March 1990.
- Statistics Canada, The Family in Canada, January 1989.
- U.S. Bureau of the Census, Projections of the Population of the United States by Age, Sex, and Race: 1988 to 2080, 1989.